

REMARKS

Entry of the Declaration submitted concurrently herewith, reexamination and reconsideration of the subject application are respectfully requested in light of the comments which follow.

As correctly noted in the Office Action Summary, claims 22-45 were pending, with claims 32-40 and 42 being withdrawn from consideration. The claims have not been amended by the present response. Thus, upon entry of the present response, claims 22-45 are pending and await further consideration on the merits.

Entry of the forgoing is appropriate pursuant to 37 C.F.R. §1.116 for at least the following reasons. First, the response clearly places the application in condition for allowance. Second, the present response places the application in better form for an appeal.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 22-31, 41 and 43-45 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,214,306 to Aubert et al. (hereafter "*Aubert et al.*") on the grounds set forth in paragraph 4 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present invention is directed to a composition, methods for its preparation, and use as a catalyst, which possess certain beneficial characteristics and properties. Thus, a composition formed according to the principles of the present invention may exhibit, *inter alia*, improved reducibility (i.e., the capacity of the composition to be reduced in a reducing atmosphere and to be reoxidized in an

oxidizing atmosphere), at lower temperatures when compared to similar conventional compositions (see, e.g. page 1, line 25 - page 2, line 5 of the present specification).

A composition formed according to the principles of the present invention is set forth in claim 22. Claim 22 recites:

22. *A composition comprising zirconium oxide and cerium oxide, the composition comprising a zirconium oxide proportion of at least 50% by weight, a maximum reducibility temperature of at most 500°C, a specific surface area of at least 40m²/g after calcination for 6 hours at 500°C, and comprising a predominant tetragonal phase.*

Aubert et al. and the present application are owned by the same assignee.

Aubert et al. fails to anticipate the composition recited in claim 22.

As evident from the above, claim 22 requires, *inter alia*, a composition comprising "a maximum reducibility temperature of at most 500°C." By contrast, *Aubert et al.* fails to contain any disclosure whatsoever concerning the reducibility capacity/temperature characteristics of the compositions described therein. Thus, *Aubert et al.* clearly fails to anticipate the composition recited in claim 22.

Despite this acknowledge to lack of disclosure, is nevertheless alleged in the grounds for ejection that the claimed maximum reducibility temperature "is inherent and expected."

When assertions are made based upon features that are not expressly disclosed in the prior art, the Federal Circuit has repeatedly stated that in order to establish the inherency of the missing element it must be shown that the missing element must necessarily be present in the reference, and would be recognized as such by those persons of ordinary skill in the art. *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ2d 1746, 1749-50 (Fed. Cir. 1991; In re

Oelrich, 666 F.2d 578,581, 212 USPQ 323, 326 (C.C.P.A. 1981) ("inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient"); *Standard Oil Co. v. Montedison, S.p.A.*, 664 F.2d 356, 372, 212 USPQ 327, 341 (3rd Cir. 1981) (for a claim to be inherent in the prior art it "is not sufficient that a person following the disclosure sometimes obtain the result set forth in the [claim]; it must invariably happen").

If rejecting a claim requires reliance upon the alleged inherent features of the prior art, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

By the present response, applicants submit concurrently herewith evidence in the form of a Declaration Pursuant to 37 CFR §1.132 of Emmanuel Rohart, PhD that clearly establishes that the claimed maximum reducibility temperature is not inherent to the disclosed composition of *Aubert et al.* As set forth in the Declaration, a number of material formulations were prepared according to the teachings of *Aubert et al.*, and their maximum reducibility temperature is measured. The results are summarized in the table below.

Mixed Oxide Compositions and Weight Percentages	Maximum Reducibility Temperature (°C)
ZrO ₂ /CeO ₂ /La ₂ O ₃ - 70%/20%/10%	545°C
ZrO ₂ /CeO ₂ - 80%/20%	552°C
ZrO ₂ /CeO ₂ - 60%/40%	573°C

As evident from the above, the compositions prepared according to the teachings of *Aubert et al.* do not inherently or expectedly possess a maximum reducibility temperature that is no greater than 500°C, as required by claim 22. Therefore, reconsideration withdrawal of the rejections respect requested.

The remaining claims rejected on the above noted grounds depend from claim 22. Thus, these claims are also distinguishable over *Aubert et al.* for at least the same reasons noted above.

In addition, the claims withdrawn from examination as being directed to a non-elected invention also depend from claim 22. Thus, rejoinder and allowance of the withdrawn claims is also respectfully requested.

CONCLUSION

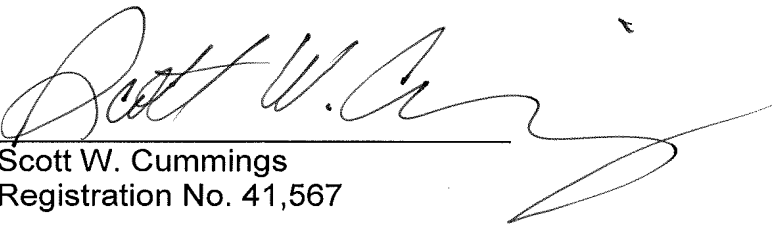
From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 28, 2009

By:



Scott W. Cummings
Registration No. 41,567

Customer No. 21839
703 836 6620